

Listing and Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

- 1 1. (currently amended) A voltage level translator for operating an
2 operational amplifier integrated circuit designed for operation with a single
3 ended power supply, to operate with a split level power supply having a center
4 tapped ground, comprising:
 - 5 first voltage level translating means for connecting a first polarity power
6 supply terminal of the operational amplifier integrated circuit and a first
7 capacitor coupled to ground to a first polarity of the power supply,
 - 8 second voltage level translating means for connecting a second polarity
9 power supply terminal of the operational amplifier integrated circuit and a
10 second capacitor coupled to ground to a second polarity of the split level power
11 supply,
 - 12 means for connecting a signal input terminal of the operational amplifier
13 to a center tapped ground of the split level power supply and:
 - 14 wherein another signal input terminal of the operational amplifier is
15 coupled to a signal source referenced to ground without any DC isolation
16 capacitors connected in series with the amplifier and the output terminal of the
17 operational amplifier is coupled to a signal load referenced to ground without
18 any DC isolation capacitors connected in series with the amplifier, and wherein
19 said operational amplifier has a predetermined maximum voltage rating and
20 said split level power supply having a voltage greater than said maximum
21 voltage rating, and said first voltage level translating means and said second
22 voltage level translation means each comprise a respective Zener diode having

23 respective Zener voltages selected to enable said integrated circuit to operate
24 within said maximum voltage rating when powered by said split level power
25 supply.

1 2. (cancelled)

1 3. (previously presented) The voltage level translator of claim 1 wherein
2 the signal load is a loudspeaker having one terminal referenced to ground.

1 4. (original) The voltage level translator of claim 1 wherein the amplifier
2 includes a plurality of amplifiers on the same integrated circuit chip having a
3 common substrate, and all of the plurality of amplifiers are also voltage level
4 translated, the substrate being biased the same amount with respect to each of
5 the plurality of amplifiers.

1 5. (original) The voltage level translator of claim 1 wherein the split level
2 power supply having a center tapped ground also provides power to other
3 circuits performing other functions.

1 6. (currently amended) The voltage level translator of claim 5, wherein
2 the amplifier includes an output load comprising an earphone and the other
3 circuits performing other functions is a DVD player.

1 7. (original) The voltage level translator of claim 1 wherein the amplifier
2 has an AC reference which is connected to the DC voltage ground.

1 8. (cancelled)

1 9. (cancelled)

1 10. (previously presented) A voltage level translator for operating an
2 operational integrated circuit designed for operation with a single ended power
3 supply, to operate with a split level power supply having a center tapped
4 ground, comprising:
5 a first voltage level translating means for connecting a first polarity
6 power supply terminal of the operational amplifier integrated circuit and a first
7 capacitor coupled to ground to a first polarity of the split level power supply;
8 a second voltage level translating means for connecting a second
9 polarity power supply terminal of the operational amplifier integrated circuit and
10 a second capacitor coupled to ground to a second polarity of the split level
11 power supply;
12 said operational amplifier has a predetermined maximum voltage rating
13 and said split level power supply having a voltage greater than said maximum
14 voltage rating; and
15 said first voltage level translating means and said second voltage level
16 translation means each comprise a respective Zener diode having respective
17 Zener voltages selected to enable said integrated circuit to operate within said
18 maximum voltage rating when powered by said split level power supply.